

CLAIMS

1. A polyolefin-based resin composition used in contact with or near to
5 vinyl chloride-based resins, comprising:

(A) 100 parts by mass of a polyolefin-based resin; and

(B) 0.01 to 5 parts by mass of a phenol-based antioxidant containing no
aliphatic ester group and/or a sulfur-based antioxidant containing no aliphatic
ester group.

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2. A combination of a vinyl chloride-based resin molded article and a
polyolefin-based resin molded article that are positioned in contact with or
near to each other, said polyolefin-based resin molded article being made of a
polyolefin-based resin composition comprising:

15 (A) 100 parts by mass of a polyolefin-based resin; and

(B) 0.01 to 5 parts by mass of a phenol-based antioxidant containing no
aliphatic ester group and/or a sulfur-based antioxidant containing no aliphatic
ester group.

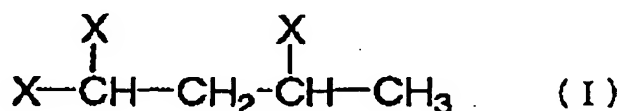
20 3. The polyolefin-based resin composition according to claim 1, further
comprising (C) a metal deactivator containing no aliphatic ester in an amount
of 0.01 to 5 parts by mass based on 100 parts by mass of the polyolefin-based
resin.

25 4. The polyolefin-based resin composition according to claim 1, further
comprising (D) a metal hydrate and/or a metal hydroxide in an amount of 50 to
250 parts by mass based on 100 parts by mass of the polyolefin-based resin.

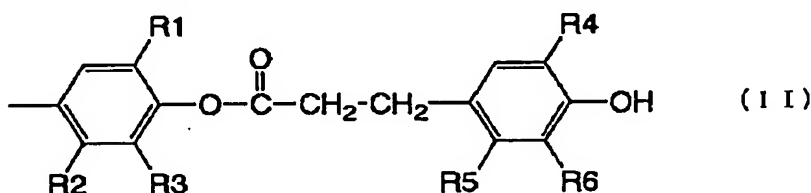
5. The polyolefin-based resin composition according to claim 1, wherein said phenol-based antioxidant (B) is at least one compound selected from the group consisting of:

(i) 2,6-di-t-butyl-4-methyl phenol;

5 (ii) a compound represented by the general formula (I):



wherein X is a group represented by the general formula (II) with the proviso
10 that the three X groups may be the same or different from each other:



15 wherein R1 and R4 are independently C₁ to C₈ alkyl and may be the same or different from each other; and R2, R3, R5 and R6 are independently hydrogen or C₁ to C₈ alkyl and may be the same or different from each other;

(iii) 1,3,5-trimethyl-2,4,6-tris(3,5-di-t-butyl-4-hydroxybenzyl)benzene;

(iv) tris(3,5-di-t-butyl-4-hydroxybenzyl)isocyanurate; and

20 (v) 4,4'-butylidenebis-(3-methyl-6-t-butylphenol).

6. The polyolefin-based resin composition according to claim 3, wherein said metal deactivator (C) containing no aliphatic ester is
1,2-bis(3,5-di-t-butyl-4-hydroxyhydrocinnamoyl)hydrazine.

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7. The polyolefin-based resin composition according to claim 4, wherein said metal hydrate and/or said metal hydroxide (D) are magnesium hydroxide and/or aluminum hydroxide.

8. A polyolefin-based resin composition used in contact with or near to vinyl chloride-based resins, comprising 100 parts by mass of polypropylene; 0.01 to 3 parts by mass of

1,2-bis(3,5-di-t-butyl-4-hydroxyhydrocinnamoyl)hydrazine, and 0.01 to 5 parts by mass of at least one antioxidant selected from the group consisting of:

(i) 2,6-di-t-butyl-4-methyl phenol;

(ii)

1,1,3-tris(2-methyl-4-[3-(3,5-di-t-butyl-4-hydroxyphenyl)propionyloxy]-5-t-butyl phenyl)butane;

(iii) 1,3,5-trimethyl-2,4,6-tris(3,5-di-t-butyl-4-hydroxybenzyl)benzene;

(iv) tris(3,5-di-t-butyl-4-hydroxybenzyl)isocyanurate; and

(v) 4,4'-butylidenebis-(3-methyl-6-t-butylphenol).

9. A polyolefin-based resin composition used in contact with or near to vinyl chloride-based resins, comprising 100 parts by mass of polypropylene; 50 to 250 parts by mass of magnesium hydroxide; and 0.01 to 5 parts by mass of at least one antioxidant selected from the group consisting of:

(i) 2,6-di-t-butyl-4-methyl phenol;

(ii)

1,1,3-tris(2-methyl-4-[3-(3,5-di-t-butyl-4-hydroxyphenyl)propionyloxy]-5-t-butyl phenyl)butane;

(iii) 1,3,5-trimethyl-2,4,6-tris(3,5-di-t-butyl-4-hydroxybenzyl)benzene;

(iv) tris(3,5-di-t-butyl-4-hydroxybenzyl)isocyanurate; and

(v) 4,4'-butylidenebis-(3-methyl-6-t-butylphenol).

10. The combination according to claim 2, wherein said vinyl chloride-based resin molded article is enclosed in said polyolefin-based resin molded article.

11. The combination according to claim 2, wherein said polyolefin-based resin molded article is enclosed in said vinyl chloride-based resin molded article.

5 12. The combination according to claim 2, wherein a layer made of said vinyl chloride-based resin molded article and a layer made of said polyolefin-based resin molded article are directly or indirectly laminated on each other.

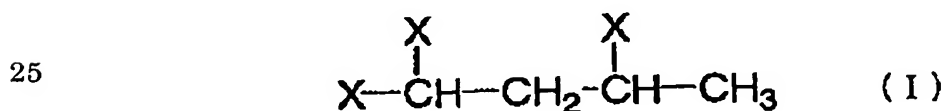
10 13. The combination according to claim 2, wherein said polyolefin-based resin composition further comprises (C) a metal deactivator containing no aliphatic ester in an amount of 0.01 to 5 parts by mass based on 100 parts by mass of the polyolefin-based resin.

15 14. The combination according to claim 2, wherein said polyolefin-based resin composition further comprises (D) a metal hydrate and/or a metal hydroxide in an amount of 50 to 250 parts by mass based on 100 parts by mass of the polyolefin-based resin.

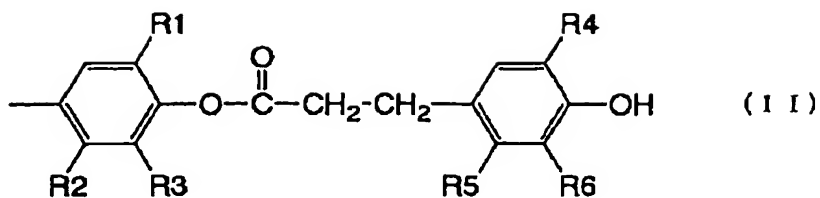
20 15. The combination according to claim 2, wherein said phenol-based antioxidant (B) is at least one compound selected from the group consisting of:

(i) 2,6-di-t-butyl-4-methyl phenol;

(ii) a compound represented by the general formula (I):



wherein X is a group represented by the general formula (II) with the proviso that the three X groups may be the same or different from each other:



5 wherein R1 and R4 are independently C₁ to C₈ alkyl and may be the same or different from each other; and R2, R3, R5 and R6 are independently hydrogen or C₁ to C₈ alkyl and may be the same or different from each other;

(iii) 1,3,5-trimethyl-2,4,6-tris(3,5-di-*t*-butyl-4-hydroxybenzyl)benzene;

(iv) tris(3,5-di-*t*-butyl-4-hydroxybenzyl)isocyanurate; and

10 (v) 4,4'-butylidenebis-(3-methyl-6-*t*-butylphenol).

16. The combination according to claim 13, wherein said metal deactivator (C) containing no aliphatic ester is
1,2-bis(3,5-di-*t*-butyl-4-hydroxyhydrocinnamoyl)hydrazine.

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17. The combination according to claim 14, wherein said metal hydrate and/or said metal hydroxide (D) are magnesium hydroxide and/or aluminum hydroxide.

20 18. A combination of a vinyl chloride-based resin molded article and a polyolefin-based resin molded article that are positioned in contact with or near to each other, said polyolefin-based resin molded article being made of a polyolefin-based resin composition comprising 100 parts by mass of polypropylene; 0.01 to 3 parts by mass of
25 1,2-bis(3,5-di-*t*-butyl-4-hydroxyhydrocinnamoyl)hydrazine; and 0.01 to 5 parts by mass of at least one antioxidant selected from the group consisting of:

(i) 2,6-di-*t*-butyl-4-methyl phenol;

(ii)

1,1,3-tris{2-methyl-4-[3-(3,5-di-t-butyl-4-hydroxyphenyl)propionyloxy]-5-t-butyl phenyl}butane;

(iii) 1,3,5-trimethyl-2,4,6-tris(3,5-di-t-butyl-4-hydroxybenzyl)benzene;

5 (iv) tris(3,5-di-t-butyl-4-hydroxybenzyl)isocyanurate; and

(v) 4,4'-butylidenebis-(3-methyl-6-t-butylphenol).

19. A combination of a vinyl chloride-based resin molded article and a polyolefin-based resin molded article that are positioned in contact with or
10 near to each other, said polyolefin-based resin molded article being made of a polyolefin-based resin composition comprising 100 parts by mass of polypropylene; 50 to 250 parts by mass of magnesium hydroxide; and 0.01 to 5 parts by mass of at least one antioxidant selected from the group consisting of:

(i) 2,6-di-t-butyl-4-methyl phenol;

15 (ii)

1,1,3-tris{2-methyl-4-[3-(3,5-di-t-butyl-4-hydroxyphenyl)propionyloxy]-5-t-butyl phenyl}butane;

(iii) 1,3,5-trimethyl-2,4,6-tris(3,5-di-t-butyl-4-hydroxybenzyl)benzene;

(iv) tris(3,5-di-t-butyl-4-hydroxybenzyl)isocyanurate; and

20 (v) 4,4'-butylidenebis-(3-methyl-6-t-butylphenol).